

## **STIC Biotechnology Systems Branch**

### **RAW SEQUENCE LISTING** **ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/573,600  
Source: IFWP  
Date Processed by STIC: 4/6/06

**THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.**

**PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:**

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

**FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221**

**TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:**

**<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>**

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<<http://www.uspto.gov/ebs/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)**
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450**
- 3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):**  
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

## Raw Sequence Listing Error Summary

### ERROR DETECTED

### SUGGESTED CORRECTION

SERIAL NUMBER: 10/573,600

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1      Wrapped Nucleics  
    Wrapped Aminos     The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
  
- 2      Invalid Line Length     The rules require that a line not exceed 72 characters in length. This includes white spaces.
  
- 3      Misaligned Amino  
    Numbering     The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
  
- 4      Non-ASCII     The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
  
- 5      Variable Length     Sequence(s)      contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
  
- 6      PatentIn 2.0  
    "bug"     A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s)             . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
  
- 7      Skipped Sequences  
    (OLD RULES)     Sequence(s)      missing. If intentional, please insert the following lines for each skipped sequence:  
                               (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
                               (i)     SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
                               (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
                               This sequence is intentionally skipped  
                               Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
  
- 8      Skipped Sequences  
    (NEW RULES)     Sequence(s)      missing. If intentional, please insert the following lines for each skipped sequence.  
                               <210> sequence id number  
                               <400> sequence id number  
                               000
  
- 9      Use of n's or Xaa's  
    (NEW RULES)     Use of n's and/or Xaa's have been detected in the Sequence Listing.  
                               Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
                               In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
  
- 10      Invalid <213>  
    Response     Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence. (see item 11 below)
  
- 11      Use of <220>     Sequence(s)      missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section or use "chemically synthesized" as explanation. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of Sequence Rules
  
- 12      PatentIn 2.0  
    "bug"     Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
  
- 13      Misuse of n/Xaa     "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



IFWP

## RAW SEQUENCE LISTING

DATE: 04/06/2006

PATENT APPLICATION: US/10/573,600

TIME: 10:49:35

Input Set : A:\UPN-P3230-sequence listing.txt

Output Set: N:\CRF4\04062006\J573600.raw

3 <110> APPLICANT: The Trustees of the University of Pennsylvania  
 4 Wilson, James M.  
 5 Gao, Guangping  
 6 Alvira, Mauricio R.  
 7 Vandenberghe, Luk H.  
 9 <120> TITLE OF INVENTION: Adeno-Associated Virus (AAV) Clades, Sequences, Vectors  
 10 Containing Same, and Uses Therefor  
 12 <130> FILE REFERENCE: UPN-P3230PCT  
 C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/573,600  
 C--> 14 <141> CURRENT FILING DATE: 2006-03-24  
 14 <150> PRIOR APPLICATION NUMBER: US 60/508,226  
 15 <151> PRIOR FILING DATE: 2003-09-30  
 17 <160> NUMBER OF SEQ ID NOS: 236  
 19 <170> SOFTWARE: PatentIn version 3.3  
 21 <210> SEQ ID NO: 1  
 22 <211> LENGTH: 2211  
 23 <212> TYPE: DNA  
 24 <213> ORGANISM: adeno-associated virus, clone hu.31  
 26 <400> SEQUENCE: 1

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 31 aacgctcgag gtcttgtgct tccgggttac aaataccttg gaccggcaa cggactcgac 180  
 33 aaggggggagc cggtaaacgc agcagacgcg gcggccctcg agcacgacaa ggcctacgac 240  
 35 cagcagctca agcccgga caaccgcgtac ctcaagtaca accacgccga cgcgagttc 300  
 37 caggagcggc tcaaagaaga tacgtctttt gggggcaacc tcgggcgagc agtcttccag 360  
 39 gccaaaaaga ggcttcttga acctcttggt ctggttgagg aagcggctaa gacggctcct 420  
 41 ggaaagaaga ggcctgtaga gcagtctcct caggaaaccgg actcctccgc gggatttggc 480  
 43 aaatcgggtg cacagcccgc taaaaagaga ctcaatttcg gtcagactgg cgacacagag 540  
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 47 cttaaatgg cttcaggtgg tggcgaccca gtggcagaca ataacgaagg tgccgatgga 660  
 49 gtgggtagtt cctcgggaaa ttggcattgc gattcccaat ggctggggga cagagtcac 720  
 51 accaccagca ccgaacctg ggccctgccc acctacaaca atcacctcta caagcaaacc 780  
 53 tccaacagca catctggagg atcttcaa atgacaacgcct acttcggcta cagcaccccc 840  
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 57 ctcacaca acaactggg attccggcct aagcgactca acttcaagct cttcaacatt 960  
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 73 ctaaaattca gtgtggccgg acccagcaac atggctgtcc agggaagaaa ctacatacct 1440

pp 1-5

Does Not Comply  
Corrected Diskette Needed

Invalid 2217 response

see den 10 on Euro  
summary  
Sheet

## RAW SEQUENCE LISTING

DATE: 04/06/2006

PATENT APPLICATION: US/10/573,600

TIME: 10:49:35

Input Set : A:\UPN-P3230-sequence listing.txt

Output Set: N:\CRF4\04062006\J573600.raw

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93 gccttcaaca aggacaagct gaactctttc atcaccagt attctactgg ccaagtcagc 2040
95 gtggagatcg agtgggagct gcagaaggaa aacagcaagc gctggaaccc ggagatccag 2100
97 tacacttcca actattacaa gtctaataat gttgaatttg ctgttaatac tgaaggtgta 2160
99 tatagtgaac ccgccccat tggcaccaga tacctgactc gtaatctgta a 2211

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102 &lt;210&gt; SEQ ID NO: 2

103 &lt;211&gt; LENGTH: 2211

104 &lt;212&gt; TYPE: DNA

105 &lt;213&gt; ORGANISM: new AAV serotype, clone hu.32

107 &lt;400&gt; SEQUENCE: 2

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112 gacagcaggg gtcttgtgct tcttgggtac aagtacctcg gaccgcgcaa cggactcgac 180
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130 gtgggtagtt cctcgggaaa ttggcattgc gattcccaat ggctggggga cagagtcac 720
132 accaccagca ccgaacctg ggcctgccc acctacaaca atcacctcta caagcaaatc 780
134 tccaacagca catctggagg atcttcaaat gacaacgcct acttcggcta cagcaccccc 840
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DATE: 04/06/2006

PATENT APPLICATION: US/10/573,600

TIME: 10:49:35

Input Set : A:\UPN-P3230-sequence listing.txt

Output Set : N:\CRF4\04062006\J573600.raw

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185 <212> TYPE: DNA
186 <213> ORGANISM: adeno-associated virus, human clone 9
188 <400> SEQUENCE:
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193 aacgctcgag gtcttgtgct tccgggttac aaataccttg gaccgcgcaa cggactcgac 180
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209 cttacaatgg cttcaggtgg tggcgacca gtggcagaca ataacgaagg tgccgatgga 660
211 gtgggtagtt cctcgggaaa ttggcattgc gattcccaat ggctggggga cagagtcac 720
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## RAW SEQUENCE LISTING

DATE: 04/06/2006

PATENT APPLICATION: US/10/573,600

TIME: 10:49:35

Input Set : A:\UPN-P3230-sequence listing.txt

Output Set: N:\CRF4\04062006\J573600.raw

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266 <212> TYPE: DNA  
267 <213> ORGANISM: new AAV serotype, clone hu.17  
269 <400> SEQUENCE: 4

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274	gacggccggg	gtctggtgct	tcttggtgct	aagtacctcg	gacccttcaa	cggactcgac	180
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278	cagcagctca	aagcgggtga	caatccgtac	ctgcggtata	accacgccga	cgccgagttt	300
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330	caaggagcct	tacctggcat	ggtctggcag	aaccgggacg	tgtacctgca	gggtcctatc	1860
332	tgggccaaga	ttcctcacac	ggacggcaac	tttcatcctt	cgcgctgat	gggaggcttt	1920
334	ggactgaaac	accgcctcc	tcagatcctg	attaagaata	cacctgttcc	cgcggatcct	1980
336	ccaactacct	tcagtcaagc	caagtggcg	tcgttcatca	cgcagtacag	caccggacag	2040
338	gtcagcgtgg	aaattgaatg	ggagctgcag	aaagagaaca	gcaagcgctg	gaacccagag	2100
340	attcagtata	cttccaacta	taacaaatct	gttaatgtgg	actttactgt	ggacactaat	2160
342	ggtgtgtatt	cagagcctcg	ccccattggc	accagatacc	tgactcgtaa	tctgtaa	2217

345 <210> SEQ ID NO: 5  
346 <211> LENGTH: 2217  
347 <212> TYPE: DNA  
348 <213> ORGANISM: new AAV serotype, clone hu.6  
350 <400> SEQUENCE: 5

351	atggctgccg	atggttatct	tccagattgg	ctcaggagaca	acctctctga	gggcattcgc	60
353	gagtgggtggg	acttgaaacc	tggagccccg	aaacccaaag	ccaaccagca	aaagcaggac	120
355	gacggccggg	gtctggtgct	tcttggttac	aagtacctcg	gacccttcaa	cggactcgac	180

## RAW SEQUENCE LISTING

DATE: 04/06/2006

PATENT APPLICATION: US/10/573,600

TIME: 10:49:35

Input Set : A:\UPN-P3230-sequence listing.txt

Output Set: N:\CRF4\04062006\J573600.raw

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357 aaggggggagc ccgtaacgc ggcggacgca ggcggcctcg agcacgacaa ggcctacgac 240
359 cagcagctca aagcgggtga caatccgtac ctgcggtata accacgccga cgccgagttt 300
361 caggagcgtc tgcaagaaga tacgtctttt gggggcaacc tcgggcgagc agtcttccag 360
363 gccaaagaagc gggttctcga acctctcggt ctggttgagg aaggcgctaa gacggctcct 420
365 ggaaagaaga gaccggtaga gccatcaccc cagcgttctc cagactcctc tacgggcatc 480
367 ggcaagacag gccagcagcc cgcgaaaaag agactcaact ttgggcagac tggcgactca 540
369 gagtcagtgc ccgaccctca accaatcgga gaaccccccg caggccccctc tgggtctggga 600
371 tctggtacaa tggctgcagg cgggtggcgt ccaatggcag acaataacga aggcgccgac 660
373 ggagtgggta gttcctcagg aaattggcat tgcgattccg catggctggg cgacagagtc 720
375 atcaccacca gcacccgacc ctgggccccctc cccacctaca acaaccacct ctacaagcaa 780
377 atctccaacg ggacatcggt aggaagcacc aacgacaaca cctacttcgg ctacagcacc 840
379 ccctgggggt attttgactt taacagattc cactgccact tctcaccag tgactggcag 900
381 cgactcatca acaacaactg gggattccgg cccaagagac tcaacttcaa gctcttcaac 960
383 atccagggtca aggaggtcac gcagaatgaa ggcaccaaga ccatcgccaa taaccttacc 1020
385 agcacgattc aggtctttac ggactcgga taccagctcc cgtacgtcct cggctctgcg 1080
387 caccaggggt gcccgctcc gttcccgcg gacgtcttca tgattctctca gtacgggtac 1140
389 ctgactctga acaacggcag tcagggcgtg ggcggttctt ccttctactg cctggagtac 1200
391 tttctttctc aaatgcggag aacgggcaac aactttgagt tcagctacca gtttgaggac 1260
393 gtgccttttc acagcagcta cgcgcatagc caaagcctgg accggctgat gaacccccctc 1320
395 atcgaccagt acctgtacta cctgtctcgg actcagtcca cgggaggtac cgcaggaact 1380
397 cagcagttgc tattttctca ggcggggcct aataacatgt cggctcaggc caaaaactgg 1440
399 ctaccggggc cctgctaccg gcagcaacgc gtctccacga cactgtcgca aaataacaac 1500
401 agcaactttg cttggaccgg tgccaccaag tatcatctga atggcagaga ctctctggta 1560
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405 ggagtcttga tgtttgggaa acagggagct ggaaaagaca acgtggacta tagcagcggt 1680
407 atgctaacca gtgaggaaga aatcaaaacc accaaccagc tggccacaga acagtacggc 1740
409 gtggtggcgg ataacctgca acagcaaaac gccgctccta ttgtaggggc cgtcaacagt 1800
411 caaggagcct tacctggcat ggtctggcag aaccgggacg tgtacctgca gggtcctatc 1860
413 tgggccaaga ttctctcacac ggacggcaac ttctatcctt cgccgctgat gggaggcttt 1920
415 ggactgaaac acccgctcc tcagatcctg attaagaata cacctgttcc cgcggatcct 1980
417 ccaactcctt tcagctaaac caagctggcg tcggtcatca cgcagtacag caccggacag 2040
419 gtcagcgtgg aaattgaatg ggagctggcg aaagagaaca gcaagcgtg gaacccagag 2100
421 attcagtata cttccaacta ctacaaatct acaaagtgtg actttgctgt caatactgag 2160
423 ggtacttatt cagagcctcg cccattggc acccgttacc tcaccgtaa cctgtaa 2217

```

426 &lt;210&gt; SEQ ID NO: 6

427 &lt;211&gt; LENGTH: 2217

428 &lt;212&gt; TYPE: DNA

429 &lt;213&gt; ORGANISM: new AAV serotype, clone hu.41

431 &lt;400&gt; SEQUENCE: 6

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432 atggctgctg acggttatct tccagattgg ctgaggaca acctctctga gggcattegc 60
434 gagggtggg acctgaaacc tggagcccc aagcccaagg ccaaccagca gaagcaggac 120
436 gacggccggg gtctgggtgt tcttggctac aagtacctcg gaccttcaa cggactcgac 180
438 aagggggagc ccgtcaacgc ggcggacgca ggcggcctcg agcacgacaa ggcctacgac 240
440 cagcagctca aagcgggtga caatccgtac ctgcggtata accacgccga cgccgagttt 300
442 caggagcgtc tacaagaaga tacgtctttt gggggcaacc tcgggcgagc agtcttccag 360
444 gccaaagaagc gggttctcga acctctcggt ccggttgagg aagctgctaa gacggctcct 420
446 ggaaagaaga gaccggtaga accgccacct cagcgttccc cagactcctc cacgggcatc 480
448 ggcaagaaag gccagcagcc cgctaaaaag agactgaact ttggtcagac tggcgactca 540
450 gaggcagtc ccgaccctca accaatcgga gaaccaccag caggccccctc tgggtctggga 600

```

Please  
convert  
this  
type 1  
env in  
subsequent  
sequences

VERIFICATION SUMMARY

DATE: 04/06/2006

PATENT APPLICATION: US/10/573,600

TIME: 10:49:36

Input Set : A:\UPN-P3230-sequence listing.txt

Output Set: N:\CRF4\04062006\J573600.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application No

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date